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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,522	07/24/2001	Hubertus Storck	4925-131PUS	4283

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EXAMINER	
JUNTIMA, NITTAYA	

ART UNIT	PAPER NUMBER
2663	

DATE MAILED: 03/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No.	Applicant(s)	
	09/889,522	STORCK, HUBERTUS	
	Examiner	Art Unit	
	Nittaya Juntima	2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 July 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-51* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-51* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 July 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *7/17/01,12/20/02*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because (i) items 3 and 6 in Fig. 2 require labels, and (ii) Fig. 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The abstract of the disclosure is objected to because of undue length and the second paragraph should be removed.

3. The disclosure is objected to because of the following informalities: section headings, i.e. BACKGROUND OF THE INVENTION, BRIEF SUMMARY OF THE INVENTION, BRIEF DESCRIPTION OF THE DRAWING(S), and DETAILED DESCRIPTION OF THE INVENTION, are missing.

Appropriate correction is required correction is required. See MPEP § 608.01(b).

Claim Objections

4. Claims 1-51 are objected to because they contain numerous informalities apparently resulting form translation. For example,

- in claim 1, ll 17-19, "the associated information ...of the ATM cell" should be changed to "the associated information contained in the payload of the ATM cells in the control unit (5)" ;

ll 20, "code" should be changed to "codes";

ll 21, "of" should be deleted;

ll 23, "cell" should be changed to "cells";

- in claim 2, ll 17-19, "the associated information ...of the ATM cell" should be changed to "the associated information contained in the payload of the ATM cells in the control unit (5)" ;

ll 19, "code" should be changed to "codes";

ll 23, "integration of" should be changed to "integrating";

- in claims 15-16 and 50, "Specification" should be added following "2";
- the words "UTOPIA", "CRC", VPI/VCI" should be spelled out;

- claims 23-26 and 35-36 should be rewritten as system claims with the incorporation of the ATM cell structure recited in claim 23.

Applicant is requested to carefully review the claims to correct the informalities. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-51 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-51 contain numerous antecedent basis problems and unclear recitations apparently resulting form translation. The intended limitations of these claims therefore cannot be distinguished with accuracy. For example, the phrases "such as" and "e.g." in claims 1, 2, 23, 27, and 31 render the claim indefinite; "the physical layer" and "the ATM layer" in claim 3 and "the request-response protocol" in claim 6 lack antecedent basis. Applicant is advised to carefully review the claim for full compliance with 35 U.S.C 112, second paragraph.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. Claims 1-6, 9-10, 13-21, 37-40, 43-44, and 49-51 are rejected under 35 U.S.C. 102(e) as being anticipated by Berenbaum et al. ("Berenbaum") (USPN 6,272,144 B1).

Regarding claim 1, Berenbaum teaches a process for writing data into registers, comprising:

- Composing ATM cells by a management unit (control processor 12 in Fig. 1), with the management unit addressing the ATM cells to a control unit (a TC device with in-band configuration 54, Fig. 3) linked to a data path interface (UTOPIA 52 connecting to control processor 12 via switch fabric 14, Fig. 1 and 3), and integration of instructions (commands 76,, Fig. 4) associated with particular devices (registers located in a TC device with in-band configuration 54, Fig. 3) in the form of an operation code (opcode, Fig. 5), together with the respective information (24-bit data, Fig. 5) into the payload of the ATM cells (Fig. 4).

- Transmitting the ATM cells (control messages, Fig. 4) to the addressed control unit (line card 50, Fig. 3) via the respective data path interface (UTOPIA 52 connecting to control processor 12 via switch fabric 14, Fig. 1 and 3). See col. 4, ll 65-col. 5, ll 7 and 23-44.

- Extracting the operation codes (opcodes of control messages, Fig. 5) being associated with particular devices (registers), and the associated information (24-bit data, Fig. 5) contained in the payload of the ATM cells (control messages, Fig. 4) in the control unit (a TC device with in-band configuration 54, Fig. 3). See col. 5, ll 45-col. 6, ll 26; the commands in a control message are processed by a control cell processor 82 of control device 54, therefore, opcodes and relevant information associated with control message must be extracted.

- If after the operation codes (opcodes identify write commands, Fig. 5), data is to be entered, setting the register values of the devices (contents of registers) according to the information (24-bit data, Fig. 5) provided in the ATM cells (control messages, Fig. 4). See col. 6, ll 65-col. 7, ll 3.

Claim 2 is a process for reading values from registers claim containing similar limitations as recited in claim 1, i.e. composing, transmitting, and extracting steps, and therefore, is rejected under the same reason set forth in the rejection of claim 1 with an addition that Berenbaum further teaches that if after the operation codes, register values (contents of the registers) are to be read out from devices (registers located in a TC device with in-band configuration 54, Fig. 3), integrating the read values into ATM cells (acknowledgement messages) with addressing to the management unit (control processor 12 in Fig. 1) and transmission of the cells to the management unit (col. 6, ll 65-col. 7, ll 24).

Regarding claims 3 and 37, Berenbaum further teaches that the devices (registers located in a TC device with in-band configuration 54, Fig. 3) are ATM interface units of a physical layer by means of which a data path UTOPIA interface (UTOPIA 52 connecting to control processor 12 via switch fabric 14, Fig. 1 and 3) provides access for an ATM layer to a physical

transmission medium (since line card 50 in Fig. 3 serves as an interface between an ATM cell signal path and a physical layer of communication medium, col. 3, ll 65-col. 4, ll 1-5, and line card 50 comprises registers, col. 4, ll 44-49, therefore, the devices read on registers of the line card).

Regarding claims 4 and 38, Berenbaum further teaches that addressing of ATM cells (control messages, Fig. 4) by the management unit (control processor 12, Fig. 1) takes place via a VPI/VCI address associated with the control unit (a TC device with in-band configuration 54, Fig. 3), col. 4, ll 65-col. 5, ll 7 and 37-42.

Regarding claims 5 and 39, Berenbaum further teaches that addressing of ATM cells (acknowledgement messages, Fig. 4) to the management unit (control processor 12, Fig. 1) takes place via a VPI/VCI address associated by the control unit (a TC device with in-band configuration 54, Fig. 3), col. 4, ll 65-col. 5, ll 97 and 37-42.

Regarding claims 6 and 40, Berenbaum further teaches that transmission of the ATM cells (control messages, Fig. 4) is based on a request-response protocol (col. 4, ll 65-col. 5, ll 4).

Regarding claims 9 and 43, Berenbaum further teaches that prior to any instructions (commands in control messages, Fig. 4), the control unit (a TC device with in-band configuration 54, Fig. 3) checks a checksum (CRC, Fig. 6) transmitted with an ATM cell (control messages, Fig. 4) received, and carries out the instructions only if no transmission error is detected; otherwise it discards the ATM cell and is ready to receive new ATM cells. See col. 2, ll 60-col. 3, ll 1, 21-24, and col. 6, ll 45-55.

Regarding claims 10 and 44, Berenbaum further teaches that after each processing of the instructions of an ATM cell (control message with a read command), the control unit (a TC

device with in-band configuration 54, Fig. 3) places updated content of an entire cell (replacing the 24-bit data field with contents of the addressed register) to be transmitted to the management unit (control processor 12, Fig. 1) into an intermediate memory (cell buffer 86, Fig. 7). See col. 6, ll 65-col. 7, ll 11.

Regarding claims 13 and 49, Berenbaum further teaches that the control unit (a TC device with in-band configuration 54, Fig. 3) autonomously and regularly reads data from devices (registers located in a TC device with in-band configuration 54, Fig. 3) connected to it and transmits such data, integrated into ATM cells (acknowledgement messages), to the management unit (control processor 12, Fig. 1). See col. 4, ll 65-col. 5, ll 1-11.

Regarding claim 14, Berenbaum teaches a control unit (a line card 50, Fig. 3) providing access to a management interface (a connection between TC device 54 and a PMD 56, Fig. 3) of at least one device (a TC device with in-band configuration 54 and line card 50, Fig. 3) comprising registers and to a data path interface (UTOPIA 52 connecting to control processor 12 via switch fabric 14, Fig. 1 and 3) of an ATM network Fig. 1), with the control unit being suitable for:

Receiving ATM cells (control messages) composed by a management unit (control processor 12, Fig. 1) and destined for the control unit via the data path interface. See col. 4, ll 6-19, 25-28, 35-49, 65-col. 5, ll 4.

Extracting and carrying out individual instructions (read and/or write commands, Fig. 4) associated with a particular device (a TC device with in-band configuration 54, Fig. 3) from the payload of these cells, in particular reading and/or writing of register data into the devices (a TC

device with in-band configuration 54 and line card 50, Fig. 3) or from the devices. See col. 6, ll 65-col. 7, ll 9.

Extracting the instructions and carrying out in respect of the respective device (a TC device with in-band configuration 54 and line card 50, Fig. 3). See col. 6, ll 65-col. 7, ll 9.

Regarding claims 15-16, and 50, since a line card 50 of Fig. 3 comprises an ATM Utopia port 52 and a PHY device 56 (col. 4, ll 6-19), it is inherent that the management interface and the data path interface must correspond to the management interface and the data path interface as specified in Appendix 2 of Utopia Level 2 Specification.

Regarding claim 17, Berenbaum further teaches that the control unit (a line card 50, Fig. 3) is suitable for composing the register data read from the registers of the devices (a TC device with in-band configuration 54 and line card 50, Fig. 3) to become ATM cells (acknowledgement messages responding to read commands, Fig. 4), addressing it to the management unit (control processor 12, Fig. 1) by means of the VPI/VCI address of the management unit, col. 4, ll 65-col. 5, ll 9 and 37-42,and col. 6, ll 65-col. 7, ll 9.

Regarding claim 18, Berenbaum further teaches that the control unit (a line card 50, Fig. 3) comprises an intermediate memory (cell buffer 86, Fig. 7) for storing at least part of the content of the ATM cell (an acknowledgement message) to be transmitted to the management unit (control processor 12, Fig. 1), col. 6, ll 65-col. 7, ll 11.

Regarding claim 19, Berenbaum teaches a management system (Fig. 1) for an ATM network (Fig. 1, col. 1, ll 30-40) for configuring devices (a TC device with in-band configuration 54 and line card 50, Fig. 3) comprising registers (col. 4, ll 44-47) and a management interface (a

connection between TC device 54 and a PMD 56, Fig. 3), respectively, with the management system comprising:

Control units (line cards 50 of Fig. 3 replacing line cards 16-1 – 16-N in Fig. 1, col. 4, ll 35-49) according to claim 14 (see rejection of claim 14).

At least one management unit (control processor 12, Fig. 1) suitable for generating configuration data (content of write command) for the devices, for generating instructions (write commands) for a particular device, respectively (a TC device with in-band configuration 54), respectively, for joining instructions (write commands) and data (contents of write commands) for one device to which the same control unit (line card 50 of Fig. 3) has access as a payload of an ATM cell (command message), and for addressing the ATM cell to the respective control unit. See col. 4, ll 35-49, 65-col. 5, ll 4, 37-42, col. 6, ll 65-col. 7, ll 3.

Regarding claim 20, Berenbaum further teaches that the devices (TC device with in-band configuration 54 and line card 50 of Fig. 3) comprising registers (col. 4, ll 44-47) are connected to a unit of the ATM layer (other ATM switch 10 must be inherently included in the ATM network, col. 30-40) of the ATM network via a data path interface (UTOPIA 52 connecting to control processor 12 via switch fabric 14, Fig. 1 and 3).

Regarding claims 21 and 51, Berenbaum further teaches that the devices (TC device with in-band configuration 54 and line card 50, Fig. 3 in each line cards 16-1 – 16-N of Fig. 1, col. 4, ll 35-42) comprising registers (col. 4, ll 44-47) are interface units of physical layer, in particular PHYs (PMDs 56 in each line cards 16-1 – 16-N of Fig. 1, col. 4, ll 35-42), by way of which the ATM layer (other ATM switch 10 inherently included in the ATM network, col. 30-40) of the ATM network has access to at least one transmission medium (col. 4, ll 16-19).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 7-8, 22, and 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berenbaum et al. ("Berenbaum") (USPN 6,272,144 B1).

Regarding claims 7 and 41, Berenbaum fails to teach that the management unit (control processor 12, Fig. 1) does not send any further ATM cells to a control unit (a TC device with in-band configuration 54, Fig. 3) as long as it has not received a correct response (an acknowledge message) to a preceding ATM cell (control message) from said control unit. However, since Berenbaum discloses that control cells from the ATM data stream would be discarded until the corresponding acknowledge message is sent, col. 6, ll 55-62, therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify the teaching of Berenbaum to include that the management unit does not send any further ATM cells to a control unit as long as it has not received a correct response to a preceding ATM cell from said control unit. The suggestion/motivation to do so would have been to save network and bandwidth resources.

Regarding claims 8 and 42, Berenbaum teaches that prior to any forwarding of ATM cells (acknowledgement messages, Fig. 4) destined for the management unit (control processor 12, Fig. 1), the control unit (a TC device with in-band configuration 54, Fig. 3) forms a

checksum (CRC, Fig. 6), and prior to any forwarding of ATM cells (control messages, Fig. 4) destined for a control unit, the management unit forms a checksum, across at least part of the payload of each of the ATM cells, and integrates this sum into the ATM cells to be transmitted. See col. 4, ll 65-11, 44-46, and col. 6, ll 13-15.

However, Berenbaum does not teach that a checksum is a CRC-10 sum. An official notice is taken that a CRC-10 sum is well known and often used for checking integrity of the ATM payload. Therefore, it would have been obvious to one skilled in the art to modify the teaching of Berenbaum to include a CRC-10 sum as recited in the claim to ensure integrity of the ATM payload as long as it does not produce any unexpected results.

Regarding claim 22, Berenbaum teaches that the control unit (each off the line cards 50 of Fig. 3 replacing line cards 16-1 – 16-N in Fig. 1, col. 4, ll 35-49) has access to management interfaces (connections between TC device 54 and a PMD 56 in each line card, Figs. 1 and 3) of up to N interface units (TC device with in-band configuration 54 and line card 50, Fig. 3 in each line cards 16-1 – 16-N of Fig. 1, col. 4, ll 35-42). Berenbaum fails to explicitly teach that there are 31 interface units. However, it would have been obvious to modify the teaching of Berenbaum to include that the control unit has access to management interfaces of up to 31 interface units since such modification involves only routine skill in the art and does not produce any unexpected results.

10. Claims 11, 23-24, 26-28, 30-32, 34-36, and 45-47are rejected under 35 U.S.C. 103(a) as being unpatentable over Berenbaum et al. ("Berenbaum") (USPN 6,272,144 B1) in view of Harrtsen (USPN 6,021,124).

Regarding claims 11 and 45-47, although Berenbaum teaches a sequence number and CRC in the message trailer 78 of the acknowledgement message (Fig. 6, col. 5, ll 8-9 and 55-62) and storing an acknowledgement message in a cell buffer 86 (Fig. 7 and col. 7, ll 9-11), Berenbaum fails to teach sending a repetition cell after a specified time limit has lapsed and prior to receiving a response ATM cell addressed from the control unit, checking whether a response cell was transmitted to the management unit when receiving a repetition cell, and processing the instructions contained in the cell or retransmitting the response cell which has been sent and stored separately to the management unit accordingly.

However, in an analogous art, Haartsen teaches that (i) after a predefined time out period after sending a data packet (an ATM cell) and before receiving the associated ACK (a response cell), the source retransmits the same packet (a repetition cell) to the destination, identifying it as a repletion packet using a sequence number, and (ii) when the destination receives a repetition packet, the destination must inherently check whether the associated ACK was transmitted to the source by checking the sequence number of the received packet, and if no, the destination would inherently process the content of the packet (i.e. treating it as a new data packet) and if yes, the destination would retransmit the ACK to the source, col. 7, ll 24-44.

Given the teaching of Haartsen, it would have been obvious to one skilled in the art to modify the teaching of Berenbaum to include sending a repetition cell after a specified time limit has lapsed and prior to receiving a response ATM cell addressed from the control unit, checking whether a response cell was transmitted to the management unit when receiving a repetition cell, and processing the instructions contained in the cell or retransmitting the response cell which has been sent and stored separately to the management unit accordingly as

recited in the claim. The suggestion/motivation to do so would have been to ensure that an acknowledgement is received by the source, e.g. the management unit, in a case when an acknowledgement error occurs during the data transfer as taught by Haartsen (col. 7, ll 25-44).

Regarding claims 23, 27, and 31, Berenbaum teaches the control unit as recited in the claim (see rejection claim 14), and an ATM cell (Fig. 4) being used for transmitting management data between management unit (control processor 12, Fig. 1, and see rejection claim 19) with access to an ATM network and at least one device (a TC device with in-band configuration 54 and line card 50, Fig. 3) comprising cell header of 5 bytes and a payload space of 48 bytes (76 and 78, Fig. 4), with the payload space comprising instruction blocks (commands 1-11) in which respective bits are provided:

- for an operation code (opcode 31, Fig. 5) which identifies an instruction type;
- for identification of a device (the TC device 54, Fig. 3 must be identified using 7-bit address, Fig. 5) to which the instruction in the instruction block is directed; toggle
- which are associated with particular registers integrated in the identified device (TC device 54, Fig. 3);
- for data required for carrying out the instruction (24-bit data field, Fig. 5).

See Figs. 4 and 5, and col. 5, ll 22-54.

And a supplementary block (trailer 78, Fig. 6), in which bits are provided:

- for identifying the cell type (the DSD field, col. 5, ll 62-col. 6, ll 13);
- as a sequential bit which is toggled with each new cell (the last bit pf PTD field used in numbering as sequence number must be toggled with each new col. 5, ll 55-62);
- for interrupt information (not defined, reads on information for payload interpretation

using DSD field, col. 6, ll 11-13); and

- for a checksum (8-bit CRC field, col. 6, ll 13-17).

However, Berenbaum does not teach that a sequential bit is toggled with each new cell which does not constitute a repetition.

In an analogous art, Haartsen teaches a sequential bit is toggled with each new cell which does not constitute a repetition, i.e. new packet has alternating sequence number and old packet has the same sequence number, col. 7, ll 37-44.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify the teaching of Berenbaum to include that a sequential bit is toggled with each new cell which does not constitute a repetition. The motivation/suggestion to do so would have been to determine whether a new or an old data is received from the source as taught by Haartsen (col. 7, ll 37-44).

Regarding claims 24, 28, and 32, Berenbaum further teaches that 11 instruction blocks (11 commands, 76, Fig. 4) and a supplementary blocks of 4 bytes (trailer 78, Fig. 4) each are used in each payload space, col. 5, ll 22-34.

Regarding claims 26, 30, and 34, Berenbaum further teaches a "big endian order" is used (col. 5, ll 34-37).

Regarding claims 35 and 36, Berenbaum further teaches the use of an ATM cell of claim 3 (see rejection of claim 23) is for configuring/for reading out of particular register values available in ATM interface units (TC device with in-band configuration 54 and line card 50, Fig. 3 in each line cards 16-1 – 16-N of Fig. 1, col. 4, ll 35-49) of physical layer (PMDs 56 in each line cards 16-1 – 16-N of Fig. 1, col. 4, ll 35-42).

Allowable subject matter

11. Claims 12, 25, 29, 33, and 48 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nittaya Juntima whose telephone number is 571-272-3120. The examiner can normally be reached on Monday through Friday, 8:00 A.M - 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nittaya Jnntima
March 7, 2005

RICKY NGO
PRIMARY EXAMINER

3/7/05